Programing a Camera

Some Canon cameras have been hacked, providing the user with considerable control of the camera's operation. The program goes on the camera's memory stick, and is processed directly by the camera, without using an external microcontroller.

It includes capability of logging some camera parameters, controlling the picture taking interval, focus distances, some motion detection capability save RAW (uncompressed) versions of photos, etc.

Determine what camera capabilities you need, then search through the supported cameras for one that meets. You may be able to obtain a used or refurbished version of the older models if needed.

Some codes may need modifications to support a specific camera's specifications. For example the "timeout" on the A480 is shorter (about 180s) compared to that assumed in the Motion Detection script (about 600s) but making that change in the code, gets it working.

See:

Canon Powershot A480 w/CHDK (UBasic scripting/programming Language) http://gdlp01.c-wss.com/gds/7/0300001857/01/PSA480_CUG_EN.pdf

CHDK - http://chdk.wikia.com/wiki/CHDK_User_Manual

CHDK Basic (programming Language)

http://chdk.wikia.com/wiki/UBASIC/TutorialScratchpad

http://chdk.wikia.com/wiki/UBASIC/uBASIC_syntax

Intervalometer - http://chdk.wikia.com/wiki/UBASIC/Scripts:_Ultra_Intervalometer

Motion detection -

http://chdk.wikia.com/wiki/UBASIC/Scripts: Multipurpose Motion Detection